Claims

[1] An apparatus for adjusting a direction of wind in a cooling and warming system of a vehicle, comprising:

a body 20 in which a guide groove 22 having a spring 30 is formed at left and right sides, and a switch 21 having an engaging hole 23 at an upper center portion is formed, and an elongated hole 24 is formed in a lower side of the engaging hole 23; and

an adjusting plate 10 in which an engaging protrusion 11, 12 is protruded from the upper and lower sides of the back surface, and a support protrusion 13 into which an upper end of the spring 30 is inserted is protruded from a lower surface of both sides, wherein the adjusting plate 10 is engaged with a guide groove 22 of the body 20,

wherein warming and cooling wind from the warming and cooling system of a vehicle are discharged in the direction of an upper surface of the dashboard 40 by an adjusting plate 10 that appears and disappears from the upper portion of the ventilation port 41.

An apparatus for adjusting a direction of wind in a cooling and warming system of a vehicle, comprising:

a body 200 in which a guide groove 202 is formed at left and right sides, and an elongated hole 204 is formed at a center;

an adjusting plate 100 in which an engaging protrusion 102 is protruded from a lower side of the back surface, and a rack gear 101 is formed in one side of the lower surface, and the body 200 is engaged to the guide groove 202; and a motor 300 in which a driving gear 301 is engaged with the rack gear 101 wherein said motor 300 is rotated in a normal or reverse direction based on an operation of a switch 201,

wherein warming and cooling wind from the warming and cooling system of a vehicle are discharged in the direction of an upper surface of the dashboard 40 by an adjusting plate 10 that appears and disappears from the upper portion of the ventilation port 41.

An apparatus for adjusting a direction of wind in a cooling and warming system of a vehicle that is characterized in that warming and cooling wind from the warming and cooling system of a vehicle are discharged in the direction of an upper surface of the dashboard 40 by an adjusting plate 500

[3]

[2]

WO 2004/085181 PCT/KR2004/000512

in such a manner that a circular adjusting plate 500 is independently provided and is inserted into an end portion of the dashboard 40 contacting with a front wind shield 50 for thereby surrounding an upper side of the ventilation port 41.

9